

CARBON FOOTPRINT FOR GOLD FIELDS

YEAR: 2017

Operation	Scope 1 Emissions											Scope 2 Emissions	Total Scope 1&2 Emissions	
	DIESEL: HAULAGE AND OTHER	DIESEL: POWER GENERATION	Petrol	LPG	Natural Gas	Coal	Fugitive Mine Methane	Mine Methane Flaring	Blasting agents	Acetylene	Total Scope 1 Emissions	Electricity		
SOUTH AFRICA	8,080.52	-	114.70	-	-	-	-	-	-	341.08	26.92	8,563.21	492,867.53	501,430.74
South Deep Joint Venture	8,079.94	-	114.70	-	-	-	-	-	-	341.08	26.92	8,562.63	492,836.18	501,398.81
Sandton Main	0.58	-	-	-	-	-	-	-	-	-	-	0.58	31.35	31.93
WEST AFRICA	296,215.31	7,420.78	94.84	3,573.09	-	-	-	-	-	5,311.47	130.12	312,745.61	185,076.65	497,822.26
Tarkwa Gold Mine	211,793.54	-	-	280.85	-	-	-	-	-	4,414.50	119.77	216,608.65	140,174.91	356,783.56
Damang Gold Mine	84,339.14	7,420.78	-	3,288.32	-	-	-	-	-	896.98	10.35	95,955.55	44,822.43	140,777.98
Accra Main	82.64	-	94.84	3.93	-	-	-	-	-	-	-	181.41	79.31	260.72
AUSTRALASIA	154,122.33	4,321.24	-	3,019.76	71,776.36	-	-	-	-	1,854.45	5.61	235,099.75	160,000.73	395,100.48
St Ives Gold Mine	98,372.12	-	-	822.35	-	-	-	-	-	1,157.01	2.00	100,353.48	90,567.92	190,921.40
Agnew Gold Mine	26,301.40	2,418.31	-	753.06	-	-	-	-	-	381.65	0.87	29,855.30	52,791.77	82,647.08
Gold Fields DHC Pty Ltd	4,660.74	1,330.68	-	277.24	-	-	-	-	-	28.72	0.88	6,298.27	16,512.42	22,810.69
Granny Smith Gold Mine	24,788.07	572.24	-	1,167.10	71,776.36	-	-	-	-	287.08	1.85	98,592.70	-	98,592.70
Gruyere Mining Co Pty Ltd	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perth Main	-	-	-	-	-	-	-	-	-	-	-	-	128.62	128.62
SOUTH AMERICA	33,455.92	-	36.47	239.80	-	-	-	-	-	767.00	0.75	34,499.95	44,893.74	79,393.69
Cerro Corona Gold Mine	33,413.05	-	36.47	239.80	-	-	-	-	-	767.00	0.75	34,457.08	44,863.55	79,320.62
Lima Main	42.87	-	-	-	-	-	-	-	-	-	-	42.87	30.20	73.07
GROUP	491,874.08	11,742.02	246.01	6,832.65	71,776.36	-	-	-	-	8,274.01	163.39	590,908.52	882,838.65	1,473,747.17

Operation	3.1: Purchased Goods And Services	3.2: Capital Goods	3.3: Fuel- And Energy-Related Activities (Not Included In Scope 1 Or 2)	3.4: Upstream Transportation And Distribution	3.5: Waste Generated In Operations	3.6: Business Travel	3.7: Employee Commuting	3.8: Upstream Leased Assets	3.9: Downstream Transportation And Distribution	3.10: Processing Of Sold Products	3.11: Use of sold product	3.12: End-Of-Life Treatment Of Sold Products	3.13: Downstream Leased Assets	3.14: Franchises	3.15: Investments	Total Scope 3 Emissions
SOUTH AFRICA	13,215.51	-	12,789.42	646.62	301.46	922.43	4,488.29	-	25.85	91.49	-	182.98	-	-	-	28,175.76
South Deep Joint Venture	13,211.66	-	12,788.96	646.60	301.46	328.58	4,488.29	-	25.85	91.49	-	182.98	-	-	-	27,577.59
Sandton Main	3.85	-	0.45	0.01	-	593.85	-	-	-	-	-	-	-	-	-	598.17
WEST AFRICA	73,347.18	-	152,392.06	12,132.95	1,155.33	594.94	-	-	76.90	130.63	-	261.27	-	-	-	240,091.26
Tarkwa Gold Mine	59,626.07	-	117,135.85	9,064.30	962.53	478.62	-	-	61.35	104.22	-	208.43	-	-	-	187,641.35
Damang Gold Mine	13,711.19	-	35,210.42	3,064.01	192.81	101.48	-	-	15.55	26.42	-	52.83	-	-	-	52,374.71
Accra Main	9.92	-	45.79	4.64	-	14.84	-	-	-	-	-	-	-	-	-	75.19
AUSTRALASIA	84,051.83	982.25	65,096.37	12,312.52	311.45	5,014.45	-	-	16.84	174.41	-	348.83	-	-	-	168,308.95
St Ives Gold Mine	48,404.78	-	40,490.47	6,091.61	206.70	620.92	-	-	6.56	67.91	-	135.82	-	-	-	96,024.78
Agnew Gold Mine	19,199.53	-	11,979.50	2,134.06	18.36	1,636.93	-	-	4.35	45.03	-	90.06	-	-	-	35,107.82
Gold Fields DHC Pty Ltd	4,833.64	-	1,556.14	511.62	5.75	556.52	-	-	0.71	7.30	-	14.61	-	-	-	7,486.29
Granny Smith Gold Mine	11,613.89	-	11,068.00	3,575.22	80.65	2,188.67	-	-	5.23	54.17	-	108.33	-	-	-	28,694.15
Gruyere Mining Co Pty Ltd	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Perth Main	-	-	2.26	-	-	11.40	-	-	-	-	-	-	-	-	-	13.67
SOUTH AMERICA	16,380.09	-	19,389.89	2,928.68	103.68	424.55	-	-	9,395.22	29.93	-	59.86	-	-	-	48,711.90
Cerro Corona Gold Mine	16,380.09	-	19,378.85	2,927.59	103.68	423.02	-	-	9,395.22	29.93	-	59.86	-	-	-	48,698.25
Lima Main	-	-	11.04	1.09	-	1.53	-	-	-	-	-	-	-	-	-	13.66
GROUP	186,994.62	982.25	249,667.73	28,020.77	1,871.94	6,956.37	4,488.29	-	9,514.81	426.47	-	852.93	-	-	-	485,287.87

The following categories of Scope 3 Emissions are zero.

CATEGORY	Value	Comment
3.8: Upstream Leased Assets	Zero	This is reported as zero because energy use after refining of gold is assumed to be negligible
3.11: Use Of Sold Products	Zero	
3.13: Downstream Leased Assets	Zero	No Franchises, therefore zero
3.14: Franchises	Zero	No Franchises, therefore zero
3.15: Investments	Zero	No Franchises, therefore zero

Energy carrier	Diesel	Petrol	Electricity	Total
CO2	8,081	115	492,868	501,063
Units	kl	kl	MWhr	-
Units consumed (kl, MWhr)	3,060	51	525,987	
Energy content (TJ)	110.18	2	1,894	2,005